

**Amendments to the Specification:**

Please replace paragraph [0012] with the following replacement paragraph:

[0012] ~~Figure 1~~ Figures 1A-1H shows the sequences and expression of *ARGOS*. Fig. 1A: Nucleotide and predicted amino acid sequence of *ARGOS* (Genbank accession number AY305869; SEQ ID NOs:1-2). Fig. 1B: Induction of *ARGOS* by auxin. 10 day-old seedlings of Col-O ecotype grown vertically on MS medium were sprayed with 5  $\mu$ M NAA. Roots and aerial parts were harvested at the time indicated and processed for RNA gel blot analysis. Fig. 1C: Organ specific expression of *ARGOS*. Inflorescence stems (St), leaves (L), flowers (F) and siliques (Si) were taken from 6 week-old plants grown in a growth chamber. Roots (R) and young rosette leaves (YL) were taken from 2 week-old seedlings grown vertically on MS medium. Figs. 1D-1F: *ARGOS*-GUS expression in a 12 day-old seedling (Fig. 1D), flower (Fig. 1E), and young silique (Fig. 1F). Bar = 5mm. Figs. 1G-1H: Cellular localization of *ARGOS*-GFP fusion protein (Fig. 1H) and GFP control (Fig. 1G). Bar = 100  $\mu$ m.

Please replace paragraph [0013] with the following replacement paragraph

[0013] ~~Figure 2~~ Figures 2A-2E shows the phenotypic and molecular characterization of *ARGOS* transgenic plants. Fig. 2A: 30 day-old plants of *35S-anti-ARGOS* (left), vector control (middle) and *35S-ARGOS* (right) grown in a growth chamber at 23°C under a 16h-light/8h-dark photoperiod. Bar = 10mm. Fig. 2B: Expression analyses of *ARGOS* in transgenic plants. A vector control line (CK1-

4) and two independent lines of *35-anti-ARGOS* (A3-5, A13-3) and *35S-ARGOS* (S1-1, S6-4) were used to analyze transgenic and endogenous gene expression. The RNA gel blot was probed with *ARGOS* coding region for transgene expression, with an *anti-ARGOS* RNA to detect over-expression of *ARGOS* (*ARGOS-OE*) and with a 5'-nontranslated region of *ARGOS* for endogenous *ARGOS* expression (*ARGOS*). Fig. 2C: Leaf fresh weight of 6 week-old plants. At least 10 plants from two independent lines were measured in vector control, *35S-anti-ARGOS* and *35S-ARGOS* plants. N = 10 and error bars are shown. Fig. 2D: Morphology (top panel) and dimensions (bottom panel) of 5 week-old fifth leaves. Bar = 5mm. N = 10 and error bars are shown. Fig. 2E: Phenotype of flower, inflorescence stem and silique of *35S-anti-ARGOS*, vector control, and *35S-ARGOS* plants (from left to right). Bar = 5mm.

Please replace paragraph [0014] with the following replacement paragraph:

**[0014]** ~~Figure 3~~ Figures 3A-3D shows the anatomical analysis of fifth leaves in transgenic *ARGOS* plants. Fig. 3A: Adaxial epidermal pavement cells of fully expanded fifth leaves of *35S-anti-ARGOS* (left), vector control (middle) and *35S-ARGOS* (right) plants. Bar = 100  $\mu$ m. Fig. 3B: Transverse sections of leaf blades of *35S-anti-ARGOS* (top), vector control (middle) and *35S-ARGOS* (bottom) plants. Bar = 100  $\mu$ m. Fig. 3C: Dimensions of palisade cells. X-, Y- and Z-axis were defined as leaf width, length, and thickness direction, respectively. At least 40 cells of each line were measured under a microscope. Error bars are shown. Fig. 3D: Numbers of palisade cells and total number of mesophyll cells in X-axis and Y-axis of leaves. 4 leaves of each line were sectioned and the cells

were counted in the middle of leaves in X-axis and about 1mm from the midvein in Y-axis. Bar = 100  $\mu$ m. Error bars are shown.

Please replace paragraph [0015] with the following replacement paragraph:

[0015] ~~Figure 4~~ Figures 4A-4F shows the effect of ARGOS on growth and cell meristematic competence. Fig. 4A: Eight week-old plant of vector control (left and *35S-ARGOS* (right) grown in a growth chamber. Bar = 10mm. Fig. 4B: Growth kinetics of fifth leaf in *35S-anti-ARGOS*, vector control (CK), and *35S-ARGOS* plants. 10 leaves from each line were measured after emergence at an interval of 3 days. Error bars are shown. Fig. 4C: CycB1-GUS activity in 16 day-old seedling of CK (left) and *35S-ARGOS* (right). Bar = 5mm. Fig. 4D: *ANT* and *CycD3;1* transcript levels in juvenile and fully-expanded rosette leaves of vector control (CK) and *ARGOS* transgenic plants. Figs. 4E-4F: Neoplasia in leaf explants of *ARGOS* transgenic plants. Fig. 4E: Note the callus formation in *35S-ARGOS* (right) but not in vector control (left). Leaf explants from 4 week-old transgenic plants were cultured on hormone-free MS medium and photographs were taken 10 days after excision. Fig. 4F: Callus growth in leaf explants of vector control (top), *35S-ARGOS* (middle) and *35S-anti-ARGOS* (bottom) plant. The explants were cultured on MS medium containing 4.5  $\mu$ M 2,4-D and 0.5  $\mu$ M kinetin and photographed at 40 days without changing the medium. Bar = 5mm.

Please replace paragraph [0016] with the following replacement paragraph:

[0016] ~~Figure 5~~ Figures 5A-5B shows the loss of function of ANT blocks organ enlargement in 35S-*ARGOS* transgenic plants. Fig. 5A: Morphology of 4 week-old plants (top) and inflorescence (bottom) of 35S-*ARGOS/ANTANT* or 35S-*ARGOS/ANTant-1* (35S-*ARGOS/ANT*\_\_) and 35S-*ARGOS/ant-1ant-1* plants in line L2-4. Bar = 10mm. Fig. 5B: Endogenous *ANT* mRNA and transgenic *ARGOS* mRNA levels in the two types of plants in panel A.

Please replace paragraph [0017] with the following replacement paragraph:

[0017] ~~Figure 6~~ Figures 6A-6C shows that *ARGOS* acts downstream of *AXR1*. Fig. 6A: *ARGOS* expression in wild type, *axr1-3* and *axr1-12* plants with/without auxin treatment. RNAs were extracted from 12 day-old seedlings treated with 5  $\mu$ M NAA (+) or H<sub>2</sub>O (-) for 3 hours. Numbers above lanes refer to *ARGOS* expression levels relative to the 28S rRNA levels. Fig. 6B: 3 week-old plants of WT (Col.) *axr1-3*, transgenic *axr1-3* carrying an empty vector and transgenic *axr1-3* carrying a 35S-*ARGOS* transgene. Bar = 10mm. Fig. 6C: Endogenous *ARGOS* mRNA and transgenic *ARGOS* (*ARGOS-OE*) mRNA levels in WT, *axr1-3*, *axr1-3* (vector) and *axr1-3* (35S-*ARGOS*).